

Title (en)  
SUBSTITUTED PYRIDINES AS INHIBITORS OF DNMT1

Title (de)  
SUBSTITUIERTE PYRIDINE ALS INHIBITOREN VON DNMT1

Title (fr)  
PYRIDINES SUBSTITUÉES UTILISÉES EN TANT QU'INHIBITEURS DE DNMT1

Publication  
**EP 3468953 B1 20240522 (EN)**

Application  
**EP 17733902 A 20170613**

Priority

- US 201662349227 P 20160613
- US 201662393256 P 20160912
- US 201662412343 P 20161025
- IB 2017053511 W 20170613

Abstract (en)  
[origin: WO2017216726A1] The invention is directed to substituted pyridine derivatives. Specifically, the invention is directed to compounds according to Formula (Iar): (Iar) wherein Yar, X1ar, X2ar, R1ar, R2ar, R3ar, R4ar and R5ar are as defined herein; or a pharmaceutically acceptable salt or prodrug thereof. The compounds of the invention are selective inhibitors of DNMT1 and can be useful in the treatment of cancer, pre-cancerous syndromes, beta hemoglobinopathy disorders, sickle cell disease, sickle cell anemia, and beta thalassemia, and diseases associated with DNMT1 inhibition. Accordingly, the invention is further directed to pharmaceutical compositions comprising a compound of the invention. The invention is still further directed to methods of inhibiting DNMT1 activity and treatment of disorders associated therewith using a compound of the invention or a pharmaceutical composition comprising a compound of the invention.

IPC 8 full level  
**C07D 213/73** (2006.01); **A61K 31/4412** (2006.01); **A61P 37/00** (2006.01); **C07D 213/74** (2006.01)

CPC (source: EP IL KR US)  
**A61K 31/4412** (2013.01 - IL KR); **A61K 31/4427** (2013.01 - IL KR); **A61P 35/00** (2018.01 - EP IL US); **A61P 37/00** (2018.01 - EP IL KR US); **C07D 213/73** (2013.01 - EP IL KR US); **C07D 213/74** (2013.01 - EP IL KR US); **C07D 401/04** (2013.01 - EP IL KR US); **C07D 401/12** (2013.01 - EP IL KR US); **C07D 401/14** (2013.01 - EP IL KR US); **C07D 413/14** (2013.01 - EP IL KR US); **C07D 417/12** (2013.01 - EP IL US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
MA

DOCDB simple family (publication)  
**WO 2017216726 A1 20171221**; AU 2017283790 A1 20181122; AU 2017283790 B2 20190829; BR 112018075992 A2 20190402; CA 3026211 A1 20171221; CA 3026226 A1 20171221; CL 2018003577 A1 20190405; CN 109563043 A 20190402; CN 109563043 B 20220531; CO 2018013717 A2 20190118; CR 20180580 A 20190702; DO P2018000273 A 20190331; EP 3468953 A1 20190417; EP 3468953 B1 20240522; IL 263163 A 20181231; IL 263163 B 20211031; JO P20180120 A1 20190130; JP 2019517596 A 20190624; JP 7051829 B2 20220411; KR 20190017030 A 20190219; MA 45244 A 20190417; MX 2018015483 A 20190318; PE 20190971 A1 20190709; PH 12018502633 A1 20190930; SG 11201809559U A 20181228; US 10975056 B2 20210413; US 2019194166 A1 20190627; WO 2017216727 A1 20171221

DOCDB simple family (application)  
**IB 2017053509 W 20170613**; AU 2017283790 A 20170613; BR 112018075992 A 20170613; CA 3026211 A 20170613; CA 3026226 A 20170613; CL 2018003577 A 20181212; CN 201780036908 A 20170613; CO 2018013717 A 20181218; CR 20180580 A 20170613; DO 2018000273 A 20181207; EP 17733902 A 20170613; IB 2017053511 W 20170613; IL 26316318 A 20181121; JO P20180120 A 20181210; JP 2019517187 A 20170613; KR 20197000766 A 20170613; MA 45244 A 20170613; MX 2018015483 A 20170613; PE 2018003216 A 20170613; PH 12018502633 A 20181213; SG 11201809559U A 20170613; US 201716309121 A 20170613